

facilities-based providers. The assessment should not be based upon revenues received by a provider who provides a component, at wholesale, for another provider's finished service. The assessment should be made exclusively on retail revenues collected from end-user customers and the assessment should be structured as a surcharge so that the end user, and not the provider, is liable for the assessment.

#### VIII. SCHOOL/LIBRARY FUNDING ISSUES THAT REQUIRE ATTENTION

- A. Schools And Libraries Should Be Allowed To Choose The Bids That Best Suit Their Needs And Are Consistent With The Procurement Rules To Which They Are Otherwise Subject.

The Joint Board recommends that schools and libraries seek competitive bids for all services eligible for Section 254(h) discounts, and that the "lowest corresponding price" constitute the ceiling for the competitively bid pre-discount price.<sup>79</sup> The Joint Board, however, does not indicate whether or not schools and libraries are obligated to accept the lowest-priced bid.

U S WEST recommends that, in choosing among bids, these entities be given the flexibility the Joint Board sought to provide them in recommending a broad range of eligible services.<sup>80</sup> Accordingly, the Commission should declare specifically that schools and libraries are free to choose that bid which meets the particular school or library needs and which would be in compliance with the procurement/bid

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<sup>79</sup> Decision ¶ 546.

<sup>80</sup> Id. ¶ 458 ("We recommend that the Commission adopt a rule that provides schools and libraries with the maximum flexibility to purchase whatever package of telecommunications services they believe will meet their telecommunications service needs most effectively and efficiently.")

processes and requirements to which the school or library is otherwise generally subject. That is, if a particular school's procurement processes allow it to take into account factors other than price (e.g., reliability of provider or value add-ons) in choosing among competing bids, the Commission should not invalidate those requirements or rules by mandating that the school accept the lowest bid price.

B. The "Lowest Corresponding Price" Is Not Workable.

The Joint Board recommends that the "lowest corresponding price," defined as the lowest price charged to similarly situated non-residential customers for similar services, serve as the ceiling for the competitively bid pre-discount price for schools and libraries.<sup>81</sup> As an experienced provider and marketer of telecommunications services, U S WEST would have considerable difficulty in determining the lowest corresponding price in many cases.<sup>82</sup> For example, U S WEST often offers to end users individualized packages which may include a "free" service, the price of which would be compensated for in the duration or volume commitment of the total contract the customer accepts. Under the Joint Board's proposal, U S WEST could have to offer a school or library in the same market as the end user in the example given above that same service free.

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<sup>81</sup> Id. ¶ 546.

<sup>82</sup> It would also be a considerable administrative burden keeping track of prices offered. Each customer "package" offered would have to be broken down into its component parts, and a database would have to be developed for the sole purpose of determining the lowest corresponding price that a school or library could be offered in all of U S WEST's areas of service. There is nothing to suggest that the cost of such a database would be overcome by the kind of benefit the Joint Board proposes.

Such is clearly not required. The very nature of the competitive bid process along with the discounts represented in the Joint Board's matrix<sup>83</sup> will ensure that schools and libraries receive the lowest price. Dictating the lowest price is neither necessary nor appropriate to encourage the competition envisioned by the drafters of the 1996 Act.

IX. THE COMMISSION MUST ADOPT FINAL RULES WHICH PROVIDE BOTH RURAL HEALTH CARE PROVIDERS AND CARRIERS THE FLEXIBILITY NECESSARY TO CHOOSE AND PROVIDE, RESPECTIVELY, THOSE SERVICES WHICH WILL ADEQUATELY, ECONOMICALLY, AND EFFICIENTLY MEET RURAL HEALTH CARE PROVIDER NEEDS.

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A. The Rural Health Care Universal Service Provisions Do Not Preclude A Carrier From Recovering Up Front Its Investment For The Placement Of Facilities. Carriers Should Be Permitted Such Recovery.

It is imperative that the Commission specifically affirm that Section 254(h)(1)(A) does not preclude carriers from being able to recover their investment up-front, similar to the methodology U S WEST describes above. Absent such an interpretation on investment recovery, the Commission should make clear that if a rural health care provider seeks a service in an area where U S WEST currently does not provide that particular service, Section 254(h)(1)(A) does not compel U S WEST to provide the service.

The Health Care Advisory Board's recommendation supports this position. That Board recommended that USFs be used by eligible telecommunications providers "to build/upgrade the backbone infrastructure required for rural

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<sup>83</sup> Decision ¶ 555.

telemedicine,”<sup>84</sup> recognizing that carriers must be compensated appropriately for investments, especially those that they might not otherwise make. U S WEST urges the Commission to make specific this principle as well.

B. Rural Health Care Providers Should Be Provided Flexibility With Respect To Services Supported By The USF.

In its Public Notice, the CCB seeks comment on what services provided to rural health care providers should be eligible for universal support.<sup>85</sup> The telecommunications requirements of health care providers are most likely the provision of voice, data and image services. Data services may include the transmission of billing data, patient medical records and access to up-to-date information such as a medical library. Image services could be in the form of remote viewing of x-ray pictures, patient pictorial images, test data and microscope images, not to mention video conference calls and video presentation of surgical and other medical training procedures.

The Joint Board notes that U S WEST advocated that the Commission “avoid mandating particular services or modes of service delivery in ways that would limit customer choice, risk ‘locking in’ obsolete technologies, or hamper the most efficient results by unwisely favoring some technologies over others.”<sup>86</sup> Since there are several different methods of meeting the telecommunications needs of the health

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<sup>84</sup> October 15, 1996, Health Care Advisory Board Findings and Recommendations at 6.

<sup>85</sup> Public Notice ¶ 4.

<sup>86</sup> Decision ¶ 644 (footnote omitted).

care industry, depending on the exact needs and requirements of a particular situation, U S WEST continues to advocate such flexibility.

Services such as Integrated Switched Digital Network (“ISDN”), Private Line Transport Service (“PLTS”)/Special Access Service, Switched Access Service and Frame Relay Service (“FRS”) should not be overlooked or limited. For example, health care services in rural areas may not have ISDN available in their area, but will have 56 Kbps and possibly 1.544 Mbps PLTS services available. Utilizing PLTS, customers can often gain access to FRS. Through access to FRS, the health care provider can obtain access to the Internet or to an Internet access provider.

In the attached Appendix, U S WEST describes and discusses the advantages and disadvantages of several options from among which rural health care providers should be able to choose. Given the advantages and disadvantages of the services discussed therein, it is obvious that the Commission should not try to designate any particular service, but should permit health care service providers the flexibility to choose the service that best suits their specific needs.

However, if the Commission believes it necessary to mandate a particular service, U S WEST recommends that the Commission designate PLTS at 56/64 Kbps. It will adequately meet the various needs of rural health care providers. Also, if a carrier must invest to make this level of service available, its investment costs should be reimbursed upfront from the fund.

We note that FRS, PLTS and ISDN, or a combination thereof, will provide the services necessary for rural health care. The Commission should keep in mind,

however, that neither FRS nor ISDN is available ubiquitously, and that the cost for deploying such services where none exists may be detrimental to the universal service fund. Accordingly, U S WEST recommends that the Commission allow the appropriate reimbursement for carriers providing services at 56/64 Kbps and above that are currently available, but that it not *mandate* that services above 56/64 Kbps be deployed unless carriers are reimbursed for the up-front construction costs.

X. ULTIMATELY THE COMMISSION MUST CRAFT ITS UNIVERSAL SERVICE METHODOLOGY IN CONCERT WITH LEGISLATIVE MANDATES AND TO ACCOMMODATE THE CLEARLY CHANGED LEGAL AND MARKET ENVIRONMENT FROM THAT WHICH WAS IN PLACE WITH RESPECT TO PRIOR UNIVERSAL SERVICE INITIATIVES.

The universal service section of the 1996 Act is quite specific. Implicit subsidies which have been historically mandated in the name of public interest pursuits of federal and state regulatory commissions must be replaced by targeted, explicit and competitively neutral subsidies aimed specifically at achieving the universal service goal. As a matter of practical economics, as well as constitutional and administrative law, as the telephone market moves more and more toward competition, it will no longer be possible to maintain a regulatory system whereby a select group of competitors (i.e., ILECs) provide -- as a matter of national policy -- below-cost service to some consumers without being reimbursed for such provision by some mechanism of the federal government.

In this section we outline some essential consideration which must guide the Commission in this universal service docket in particular, as well as in all of the other action the Commission will necessarily take over the ensuing years to

implement the new Act. U S WEST fully supports the universal service goals enunciated by the Act and the Recommended Decision. It is critical, however, that these goals be pursued in the context of the reality of today's and tomorrow's telecommunications marketplace. If decision-makers and industry participants lose sight of fundamental principles that surround the development of universal service policies, it could only disrupt the universal service and pro-competitive impetus of the Act. At worst, it could destroy the national telecommunications infrastructure on which such competition and universal service is predicated.

First, U S WEST fully supports both competition and universal service. The United States is now entering a new era of telecommunications service, technology, marketing, regulation and competition. U S WEST recognizes that much of our old habits and thought patterns must change in this new market. Moreover, there is overwhelming agreement that universal service goals must not get lost in the rush of new technological and market developments.

Part of recognizing this new environment is to recognize the proper role of ILECs in this new world. Fundamentally, universal service must be undertaken in a holistic manner which respects the property rights of ILECs and which recognizes the total interdependence of universal service, access rates for exchange access, interconnection pricing, and local exchange pricing. A piecemeal approach to universal service would be doomed from the beginning.

Second, in dealing with universal service, the Commission should avoid the mistake made in the interconnection proceeding, wherein the Commission simply

did not sufficiently harmonize federal and state issues, interests, and jurisdictional powers in attempting to establish a viable interconnection plan. U S WEST submits that the First Report and Order's most serious defect was its failure to recognize that interconnection was doomed to failure unless the entirety of jurisdictions examining interconnection and service pricing could harmonize interconnection rules as a part of the overall interstate and intrastate rate structure.

The First Report and Order imposed detailed interconnection pricing rules on state regulatory authorities, rules which have the potential to wreak havoc on the subsidy-ridden state regulatory schemes now in place. However, the Commission did nothing to deal with those intrastate rate systems which the First Report and Order was disrupting. For better or worse, the industry (and, at least temporarily, the reviewing court) has concluded that much interconnection power has been vested with the state regulators.

The Commission should take care in this proceeding to recognize that it cannot operate in a vacuum in examining universal service issues. State issues, concerns, jurisdiction, and pricing concepts must be recognized, even if such state issues detract from or obstruct the implementation of the theoretically best universal service approach.

Third, very much akin to the previous principle, universal service issues cannot be dealt with by the Commission outside the context of access charge and separations reform. The Recommended Decision recognizes that at least some of

the existing access charge structures impose precisely the types of subsidies on LECs and IXC's that the Recommended Decision is trying to eliminate.<sup>87</sup>

The CCL and the Transport Interconnection Charge ("TIC") are generally subsidizing rate elements designed to keep costs low for some consumers.<sup>88</sup> Most of the CCL goes to provide residential and single line business subscribers with an interstate loop assignment price below the amount of the loop costs assigned to the interstate jurisdiction *via* separations.<sup>89</sup> To a large extent, the TIC represents a subsidy of either rural subscribers by urban ones<sup>90</sup> or of small IXC's by large ones.<sup>91</sup>

Many, if not all, of these subsidies are driven by the separations and access tariff processes, which drive the costs of providing telephone service into categories and jurisdictions chosen by regulators. Universal service funding based on targeted and explicit subsidies to those who need them funded by the entire industry (the only type of universal service support which can survive in a competitive marketplace), must be accompanied by elimination of the subsidies in the existing regulatory structures. From the Commission's immediate perspective, this means meaningful and imminent separations and access charge reform.

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<sup>87</sup> See, e.g., Decision ¶¶ 188-89.

<sup>88</sup> See generally U S WEST Petition for Waiver, filed July 24, 1996 ("Bulk Billing Waiver").

<sup>89</sup> See Decision ¶¶ 756,759. See also First Report and Order ¶¶ 718-19.

<sup>90</sup> See First Report and Order ¶¶ 718-19.

<sup>91</sup> Comptel, which represents smaller IXC's, has asked the Eighth Circuit Court of Appeals to believe that the price of interstate switched access may be "more than seven times higher than the ILEC's costs of originating and terminating long distance traffic." Comptel Brief, p 5.

Fourth, to the extent the Commission does not deal with existing implicit subsidies in other dockets, it must deal with them *via* statutory universal service fund mechanisms. The Commission really does not have the option of pushing subsidy issues back and forth from docket to docket.

We recognize, for example, that the Joint Board's recommendation that the SLC be reduced should the Commission decide to pursue a unified fund in the context of high-cost support is not controlling in matters of access charge reform. However, it is important to keep in mind that the Act requires that all subsidies be replaced by the universal service mechanism, not just those in rural high-cost areas. Should the Commission choose not to rebalance access charges on a basis which is cost based and fully compensatory, the Commission will need to develop a universal service mechanism with which to replace subsidies currently implicit in the access charge structure.

Simply stated, just because a rate for a service is found to exceed the cost of providing that particular service, the conclusion cannot be drawn that the costs thus identified are not the legitimate costs of doing business. To the contrary, these costs must be presumed to be legitimate business costs which must be recovered, and any effort to drive down one set of prices to be closer to the costs of a particular service must be accompanied by responsible increases in other prices of other services.

Fifth, as a corollary to the above paragraph, it must be recognized that the existing costs of ILECs are, unless demonstrated to the contrary, real costs to which

the ILECs are entitled to recovery. Comptel's complaint to the Eighth Circuit Court, i.e., that it is entitled to an 85% discount from cost-based access, is simply disingenuous and legally wrong.

U S WEST's costs of doing business are in no respect unreasonable. Indeed, in a formal complaint at the Commission, MCI is contending that U S WEST's costs of providing local access service are too low, not too high. If, in fact, some rates are in excess of the costs of providing the service in question (e.g., if Comptel were to be correct in its allegation that interstate switched access is priced at seven times its cost), it is not because U S WEST is providing the service in an inefficient manner or is earning supercompetitive profits.

If interstate access is priced above cost, the reason for such pricing lies heavily in regulatory decisions requiring that other services be priced below cost. Any effort to lower the price of any service *via* a regulatory proceeding on the basis that the service is priced above cost must be accompanied by action which permits the raising of the appropriate price of other below-cost services previously subsidized by the above-cost rate, or by other remedial action pursuant to the Act's universal service mandate.

Sixth, we hear much comment these days to the effect that the property and revenues of U S WEST are "ratepayer" property, as if U S WEST's property is accordingly subject to reduced constitutional protection against governmental seizure and/or manipulation because it has been utilized over the past decades to provide common carrier services on a regulated basis. Such statements and

implications are grossly erroneous and in direct contradiction to the actual state of the law and the Constitution. U S WEST's property is its own private property and is subject to the same constitutional protections as is the property of any other corporate citizen.<sup>92</sup> No matter how noble the intentions of government, the private property of U S WEST belongs to U S WEST, not to the public, the federal government, or an amorphous group of "ratepayers."

Seventh, we have heard much recently to the effect that now that competition has entered the telecommunications marketplace, ILECs can no longer expect government to guaranty them the ability to earn a profit on their operations. The implication here is that the regulatory compact whereby telephone companies were entitled to a fair rate of return on their total investment as a matter of law is no longer operative, because competitive businesses all must face the risk of loss whenever they conduct business operations. This argument misses the point of the right of regulated companies to earn a reasonable rate or return.

To be sure, if the Commission and state regulatory commissions were to simply turn LEC pricing over to the marketplace, a different analysis would be necessary. The federal government does not normally owe to any company the ability to operate profitably. On the contrary, so long as the Government stays out of the way of an American business, the right and ability to lose money is a fundamental premise in a capitalist economy.

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<sup>92</sup> See Nothorn Pacific R.R. v. North Dakota, 236 U.S. 585, 595 (1915).

But U S WEST has seen very little indication that government at any level is poised to permit U S WEST and other ILECs to operate their businesses totally as they see fit. Instead, U S WEST's interstate rates (for interconnection, network elements, and interstate access) are pervasively regulated by this Commission. Its intrastate rates are likewise subject to intensive regulation by state regulatory authorities. Under the circumstances where the prices for U S WEST's services are to a large extent set by the government, the government has an obligation to set those prices so that U S WEST can operate profitably. In the context of Commission and state proceedings affecting price, mandated price decisions in one area must be accompanied by offsetting price increases in other areas.

This basic proposition is really self evident. The government (federal, state, or combined) cannot force U S WEST to conduct business at a loss. Unless the government (in this case this Commission) is willing to deregulate U S WEST's prices, it must stand as the guarantor that the prices the government sets (or limits) are at a level which ensures the financial viability of the U S WEST enterprise as a whole.<sup>93</sup>

The prices must also be set so that each prescribed price is profitable, at least within the context of the family of services and functions whose prices are being simultaneously established.<sup>94</sup> What a regulatory authority cannot do lawfully is to remain involved in price setting, but decline to stand behind the overall profitability

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<sup>93</sup> Duquesne Light Co. v. Barasch, 488 U.S. 299, 307-08 (1989).

<sup>94</sup> Hope Natural Gas, 320 U.S. 591, 603 (1944).

of the enterprise whose prices were established, on the theory that competitive market forces eliminate the need for ensured profitability.

Eighth, in the context of the new Act, it is expected by the Joint Board (and by the Commission and state regulatory agencies) that ILECs will often engage in facilities construction which is contrary to their business judgment. The Commission's First Report and Order is replete with mandatory construction obligations, including the obligation to construct facilities for competitive carriers superior to what U S WEST would construct for its own use.<sup>95</sup> State and federal "carrier-of-last resort" obligations generally remain on the books in the case of ILECs, and ILECs are generally perceived as having the responsibility to provide service (at regulated service quality levels) to all comers,<sup>96</sup> regardless of the prudence of the investment decision or a specific interest to service.

Much of the service provided by U S WEST, especially to residential customers, is priced at less than the cost of providing the service. Indeed, the whole notion behind the Recommended Decision (and the statutory language which prompted it) is to eliminate the implicit subsidies extant in the present system with a mechanism for directly funding uneconomical telephone company investments, in

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<sup>95</sup> See U S WEST's May 16, 1996 Comments, CC Docket No. 96-98 at 32-35.

<sup>96</sup> See generally Southwestern Bell Telephone Company, et al., Application for Authority Pursuant to Section 214 of the Communications Act of 1934 to Cease Providing Dark Fiber Service, Memorandum Opinion and Order, 8 FCC Rcd. 2589 (1993), rev'd on other grounds, Southwestern Bell Telephone Co. v. FCC, 19 F.3d 1475 (D.C. Cir. 1994).

particular in high-cost areas where the cost of providing telephone service exceeds the price deemed in the public interest for the consumer to pay.

As noted above, the Commission is tasked with eliminating all implicit subsidies. But beyond general considerations of non-confiscatory rate levels for the provision of telephone service, the new marketplace now places a very heavy burden on a governmental entity seeking to coerce a company to construct facilities against its will. In such cases, the governmental structure must be such as to ensure that payment for such construction is complete, certain and timely. The government cannot force a company to construct facilities against its will unless there is available a specific payment mechanism to cover the cost of the coerced construction.<sup>97</sup> Otherwise the order directing construction is itself invalid and unenforceable. This basic notion is essential in this proceeding, in which it is contemplated that carriers (especially ILECs) will be expected to make uneconomic investments and provide below-cost service in the expectation that they will be made whole for their construction *via* the mechanisms established herein.

Ninth, in the newly emerging competitive marketplace, any government mandate that a particular service or facility be priced below cost in order to subsidize the services of others (or to achieve another public interest purpose) would constitute a partial governmental seizure of that facility. For example, if a loop is mandated to be offered at a price of **\$20.00**, while the cost of that loop is **\$40.00**

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<sup>97</sup> U S WEST's May 16, 1996 Comments, CC Docket No. 96-98 at 35.

(both per month), the mandating governmental agency has effectively seized that loop and required that it be dedicated to a public purpose.

Compensation is due to the provisioning company for the difference. While the vehicle for providing this compensation in some instances is the subject of the instant proceeding, the fundamental legal principle that governmental seizure of LEC plant results when that plant is required to be dedicated to the public purpose of providing subsidized service is key to understanding how regulators must deal lawfully with all subsidies, not just those within the ambit of this docket.

Tenth, it is also vital to remember that the subsidies which are the subject of this docket are not the only subsidies which are extant in the existing regulatory matrix. U S WEST's subsidies at the interstate level in the area of the CCL and the TIC have already been discussed. The intrastate reserve deficiency, entirely a subsidy creature of governmental creation, remains huge. Residential rates are heavily subsidized at the state levels. None of these subsidies are unique to high-cost areas or high-cost service, yet they must be dealt with for a reasonable, competitive and -- to the extent that Commission rules remain in place -- lawful telecommunications market to develop. The Recommended Decision does not propose to deal with these endemic subsidies at all. They cannot, however, be ignored.

Eleventh, the importance of proper depreciation lives cannot be overstated. A key vehicle for manipulating telephone rates and subsidizing low rates is *via* the mechanism of artificially lengthening the depreciable lives of company assets. The

type of subsidy effectuated by artificially long depreciation lives is especially pernicious, because it requires that future generations of customers subsidize current customers.

A good example of anticompetitive depreciation lives is provided by the recent state of Washington order which prescribed throughly unreasonable lives of some U S WEST plant to almost triple the lives used by U S WEST's competitors for the identical plant.<sup>98</sup> Any valid and viable long term universal service program must find a vehicle for prescribing proper depreciation lives.<sup>99</sup>

By drawing the Commission's attention to the above, U S WEST does not want the foregoing observations to seem overly negative. We are entering a new era of telecommunications service, technology, marketing, competition and regulation. U S WEST recognizes that much of our old habits and thought patterns

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<sup>98</sup> See WUTC v. U S WEST, Fifth Supplemental Order On Remand, Docket No. UT-940641, Apr. 11, 1996; aff'd sum nom. 96-2-09622-9, 95-2-16286-0, Nov. 25, 1996.

<sup>99</sup> We recognize that the Commission's efforts to preempt state jurisdiction over depreciation lives used for intrastate ratemaking were rebuffed by the Supreme Court. See generally Louisiana Public Service Com'n v. FCC, 476 U.S. 355 (1986). However, the Commission has greater preemptive power under the new Act whenever state action is found to be anticompetitive. 47 USC § 253(a),(d). In any event, the Commission must recognize that, so long as depreciation is treated as a subsidy tool, rather than as an economic evaluation of plant lives which must be applied equally among competitors, universal service -- and its supporting competitive neutrality principle (endorsed by the Joint Board) will be seriously threatened.

must change if we are to be successful. However, similar changes of *Weltanschauung* must be made by regulators as well, many along the lines suggested above.

Respectfully submitted,

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## APPENDIX

### *RURAL HEALTH CARE*

#### FRAME RELAY SERVICE, PRIVATE LINE TELEPHONE SERVICE AND ISDN

##### Frame Relay Service ("FRS") and Private Line Transport Service ("PLTS")

FRS, which has the capability of 56/64 Kbps and 1.544 Mbps speeds, can provide all of the data and packetized video/voice requirements mentioned above to rural health care providers by utilizing a 56/64 Kbps or 1.544 connection for access to the FRS.<sup>1</sup> The access connection may be available from either FRS or from the U S WEST PLTS tariff, for example.<sup>2</sup>

FRS requires that an end-user customer provide CPE purchased from either U S WEST or any other provider of Frame Relay CPE. FRS is a packet type service and requires that the data being supplied by the customer be in the packet (Frame Relay protocol). Therefore, the customer must weigh the cost of the FRS and its required CPE and the customer's service capacity needs, with other possible telecommunications solutions. For example, if the customer's needs are merely the transmission of data to a single location, such as a metropolitan clinic, then the

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<sup>1</sup> U S WEST notes that in cases where 1.544 Mbps is an uneconomical and inefficient purchase for an end user, a proliferation of entrepreneurs and carriers have aggregated services (such as 56 Kbps end users) and then utilized a 1.544 Mbps access to FRS to access an Internet Gateway.

<sup>2</sup> Different carriers obviously can have different PLTS offerings (for example, U S WEST Communications, Inc. PLTS Tariff FCC No. 5 § 7.).

provision of a simple point-to-point 56 Kbps data line from U S WEST's PLTS tariff may be all that is needed. The 56 Kbps PLTS does not require CPE to provide a special protocol. However, if the customer's networking data needs are of a more sophisticated nature and the data interchange is on a multipoint basis rather than point-to-point, the additional investment in CPE for FRS may be more appropriate.

When it comes to the provision of services *via* PLTS or FRS, the most distinguishing telecommunications characteristic between a rural health care service provider and one residing in a metropolitan areas is one of transport mileage (or Transport Channel in the terms of U S WEST's tariffed rate elements), if one views the service needs as not exceeding the 1.544 Mbps (DS1 equivalent) data threshold. If the service needs progress beyond the 1.544 Mbps threshold to one of 44.736 Mbps (DS3 Service equivalent) the most overriding characteristic difference becomes the availability of facilities, because the facility requirements change from existing copper to fiber optic. In fact, there are situations where the copper facilities themselves are either not currently available or are not of sufficient quality or capacity to provide the 1.544 Mbps grade of service needed.

Transport Channel (mileage) for FRS is only charged when the customer's Service Wire Center ("SWC") is not in the Frame Relay "cloud". The Frame Relay "cloud" extends from the U S WEST Central Office ("CO"), which houses the Frame Relay Switch, out approximately 30 miles. If the rural FRS customer's SWC is not in the "cloud," the customer must pay Transport Channel from its SWC to the nearest CO that is in the "cloud". Once in the "cloud," no additional mileage is charged. The

Transport Channel rate element provides for the transmission facilities between the SWC associated with the customer-designated premises and a FRS Point (designated Wire Center within the "cloud"). The Transport Channel is portrayed in mileage bands. Two rates apply for each band -- a flat rate per band and rate per mile. The sum of the two rates constitutes the Transport Channel rate element.<sup>3</sup> Transport Channel for PLTS is charged from the PLTS customer's SWC to the SWC of the other customer (terminating end) when the SWCs are not the same -- there is no "cloud" as there is with FRS.

### ISDN

ISDN Single Line Service ("SLS") has the capacity to transmit data at up to 128 Kbps without compression, and at speeds as high as 512 Kbps with compression. ISDN SLS is a multi-channel circuit that can be shared by multiple telephones, personal computers, facsimile machines and other terminal devices. Additionally, ISDN can handle the full range of data types commonly used in health care applications -- computer files, images, video and audio.

The architecture of ISDN SLS is expressed as 2B+D or two B channels plus one D channel. The two B channels provide the primary communications link and each channel can accommodate speeds of up to 64 Kbps. The D channel offers speeds of up to 9.6 Kbps and carries only data related information (e.g., e-mail, file transfers or credit card authorizations). The D channel can be shared by multiple

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<sup>3</sup> The FRS Transport Channel rates are the same as those for U S WEST Communications Inc.'s PLTS of the same speed.

devices at the same time. Because the D channel is based on packet communications technology, users can share the channel which allows as many as 15 independent communications to take place simultaneously.

This multi-function type of connection can be an ideal solution for the health care organizations that may want to have several applications running at once. For example: physician-to-specialty audio or video conference on one B channel, Internet access for medical research or image transfer on the second B channel and inter-clinic/office e-mail on the D channel.

One example of ISDN in use for transferring medical images is the Suburban Teleradiology Group in Edina, Minnesota, which links over 50 radiologists to the radiology lab, Fairview Hospital in Edina. The ISDN links to the lab allow these radiologists to eliminate a great amount of the travel time from their schedules since they can remain in their local office or home to view radiological images. While this particular application is not rural, it is easy to see the potential cost benefits of ISDN.

Finally, ISDN is also an excellent way for some rural health care organizations to link into other transport services such as FRS which is often used as the primary network transport solution by many health care providers and community health information networks.


ISDN is just starting to take off as a solid transport solution for video conferencing. Once it is more fully deployed, ISDN video links can be used to enable doctors to consult with patients in remote care locations. The benefit here is

that patients no longer have to travel great distances to speak with their doctor and doctors can interact with patients more frequently.

When it comes to the provision of services for ISDN, the most distinguishing telecommunications characteristic between rural health care provider services and those provided in a metropolitan areas is the availability of a disclosed switch. If the rural ISDN customer is not located near a switch, a custom link must be built. On top of these costs, the customer will pay a monthly service fee based on non-tariff pricing.

## **CERTIFICATE OF SERVICE**

I, Rebecca Ward, do hereby certify that on this 19th day of December, 1996, I have caused a copy of the foregoing **RESPONSE OF U S WEST, INC. TO RECOMMENDED DECISION** to be served via first-class United States Mail, postage prepaid, upon the persons listed on the attached service list.

  
Rebecca Ward

**\*Via Hand-Delivery**

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(CC9645E.COS/KK/lh)

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